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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,590

11/24/2003

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8022-1065

1695

466 7590 12/02/2008

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EXAMINER

BOKHARI, SYED M

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

12/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/718,590	Applicant(s) KINOSHITA ET AL.	
	Examiner SYED BOKHARI	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8 and 10-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Amendment

2. Applicant amendment filed on November 11th, 2008 has been entered. Claims 2-8 and 10-16 are pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2, 4-5, 7, 11-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ovadia (US 2004/0208544 A1) in view of Karri et al. (US 2002/0196808 A1).

Karri et al. disclose communications signaling used for reserving a communications path with the following features: regarding claim 2, a port information table describing an association of the ports to the plurality of switch controllers (Fig. 1, illustrating a communication network, see “ingress label switching router performs a routing table lookup” recited in paragraph 0015 lines 13-18 in background of the invention), a resource manager responsive to a label request indicative of a target port selected out of the ports for managing labels, and for issuing a device setup request (Fig. 2, illustrating the exemplary node of the present invention, see “allocating communication resources and connection identifiers and using the set up message” recited in paragraph 0085 lines 1-8), wherein the resource manager consults the port information table to determine a target switch controller associated with the target port out of the plurality of switch controllers (Fig. 1, illustrating a communication network, see

“the label switching router lookup for the port number in the table” recited in paragraph 0016 lines 1-12 in background of the invention), provides the device setup request for the target switch controller, (Fig. 2, illustrating the exemplary node of the present invention, see “a setup message is used” recited in paragraph 0085 lines 5-8) and wherein the target switch controller updates a setup of the switch device associated with the target switch controller (Fig. 1, illustrating a communication network, see “the information is updated” recited in paragraph 0021 lines 20-26 in background of the invention); wherein the port information table describes an association of the ports to the at least one port-to-port connection controller (Fig. 1, illustrating a communication network, see “ingress label switching router performs a routing table lookup” recited in paragraph 0015 lines 13-18 and paragraph 0077 lines 1-15), wherein the resource manager is responsive to a port-to-port connection request indicative of another target port selected out of the ports for managing the labels, and for issuing another device setup request (Fig. 2, illustrating the exemplary node of the present invention, see “allocating communication resources and connection identifiers and using the set up message” recited in paragraph 0077 lines 1-15 and paragraph 0085 lines 1-8), wherein the resource manager consults the port information table to determine a target port-to-port connection controller associated with the another target port out of at least one port-to-port connection controller (Fig. 1, illustrating a communication network, see “the label switching router lookup for the port number in the table” recited in paragraph 0016 lines 1-12 and paragraph 0077 lines 1-15) and provides the another device setup request for the target port-to-port connection controller (Fig. 2, illustrating the exemplary

node of the present invention, see “a setup message is used” recited in paragraph 0077 lines 1-15 and paragraph 0085 lines 5-8) regarding claim 14, a port information table describing an association of the ports to the plurality of switch controllers (Fig. 1, illustrating a communication network, see “ingress label switching router performs a routing table lookup” recited in paragraph 0015 lines 13-18 in background of the invention), providing to a label request indicative of a target port selected out of the ports (Fig. 2, illustrating the exemplary node of the present invention, see “allocating communication resources and connection identifiers and using the set up message” recited in paragraph 0085 lines 1-8), consulting the port information table to determine a target switch controller associated with the target port out of the plurality of switch controllers (Fig. 1, illustrating a communication network, see “the label switching router lookup for the port number in the table” recited in paragraph 0016 lines 1-12 in background of the invention), providing a device setup request for the target switch controller (Fig. 2, illustrating the exemplary node of the present invention, see “a setup message is used” recited in paragraph 0085 lines 5-8), and updating a setup of the switch device associated with the target switch controller in response to the device setup request (Fig. 1, illustrating a communication network, see “the information is updated” recited in paragraph 0021 lines 20-26 in background of the invention); regarding claim 15, a resource manager responsive to a label request for managing labels, and for issuing a device setup request (Fig. 2, illustrating the exemplary node of the present invention, see “allocating communication resources and connection identifiers and using the set up message” recited in paragraph 0085 lines 1-8) and a

switch controller controlling setup of a switching device in response to the device setup request, the switch controller being separated from the resource manager

Karri et al. does not disclose the following features: regarding claim 2, a GMPLS controller comprising, a plurality of switch controllers controlling a plurality of switch devices, respectively and each of the plurality of switch devices including at least one port; regarding claim 4, further comprising at least one port-to-port connection controller for achieving a port-to-port connection between two out of the plurality of switch devices; regarding claim 5, wherein the plurality of switch controllers include interfaces, respectively, and the interfaces uses a same protocol to receive the device setup request; regarding claim 7, wherein the resource manager manages bandwidth information of the GMPLS network; regarding claim 11, wherein the plurality of switch controllers include interfaces, respectively, and the interfaces uses a same protocol to receive the device setup request; regarding claim 12, wherein the resource manager manages bandwidth information of the GMPLS; regarding claim 14, a method for controlling switch devices provided for a GMPLS network, comprising providing a GMPLS controller including, a plurality of switch controllers controlling a plurality of switch devices, respectively, each of the plurality of switch devices including at least one port; regarding claim 15, a GMPLS controller used for a GMPLS network comprising.

Ovadia discloses an optical network for optical buffering of photonic switch fabrics with the following features: regarding claim 2, a GMPLS controller comprising (Fig. 3, a block diagram illustrating a core switching node module for use in a photonic

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burst switching network, see “controller 88 provides a control plane signaling using GMPLS protocols” recited in paragraph 0068 lines 9-11), a plurality of switch controllers controlling a plurality of switch devices, respectively (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “the switches provide switching under the control interface unit 81” recited in paragraph 0066 lines 1-9 and paragraph 0067 lines 10-12) and each of the plurality of switch devices including at least one port (Fig. 3, a block diagram illustrating a core switching node module for use in a photonic burst switching network, see “each switch contains plurality of ports” recited in paragraph 0048 lines 11-14); regarding claim 4, further comprising at least one port-to-port connection controller for achieving a port-to-port connection between two out of the plurality of switch devices (Fig. 3, a block diagram illustrating a core switching node module for use in a photonic burst switching network, see “controller 88 provides a control plane signaling using GMPLS protocols” recited in paragraph 0068 lines 9-11 and paragraph 0048 lines 11-14); regarding claim 5, wherein the plurality of switch controllers include interfaces, respectively, and the interfaces uses a same protocol to receive the device setup request (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “the control interface unit 81 whereas the network supports GMPLS protocol” recited in paragraph 0066 lines 1-11); regarding claim 7, wherein the resource manager manages bandwidth information of the GMPLS network (Fig. 1, a simplified flow diagram illustrating a photonic burst switching network, see “the ingress and egress switching node reserved bandwidth or release bandwidth is managed by the controller” recited in paragraph 0039 lines 1-8); regarding claim 11,

wherein the plurality of switch controllers include interfaces, respectively, and the interfaces uses a same protocol to receive the device setup request (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “the control interface unit 81 whereas the network supports GMPLS protocol” recited in paragraph 0066 lines 1-11); regarding claim 12, wherein the resource manager manages bandwidth information of the GMPLS (Fig. 1, a simplified flow diagram illustrating a photonic burst switching network, see “the ingress and egress switching node reserved bandwidth or release bandwidth is managed by the controller” recited in paragraph 0039 lines 1-8); regarding claim 14, a method for controlling switch devices provided for a GMPLS network (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “switching network supports GMPLS switching” recited in paragraph 0066 lines 1-5), comprising providing a GMPLS controller including (Fig. 3, a block diagram illustrating a core switching node module for use in a photonic burst switching network, see “controller 88 provides a control plane signaling using GMPLS protocols” recited in paragraph 0068 lines 9-11), a plurality of switch controllers controlling a plurality of switch devices, respectively (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “the switches provide switching under the control interface unit 81” recited in paragraph 0066 lines 1-9 and paragraph 0067 lines 10-12) and each of the plurality of switch devices including at least one port (Fig. 3, a block diagram illustrating a core switching node module for use in a photonic burst switching network, see “each switch contains plurality of ports” recited in paragraph 0048 lines 11-14); regarding claim 15, a GMPLS controller used for a GMPLS network comprising (Fig. 3,

a block diagram illustrating a core switching node module for use in a photonic burst switching network, see "controller 88 provides a control plane signaling using GMPLS protocols" recited in paragraph 0068 lines 9-11),

It would have obvious to one of the ordinary skill in the art at the time of invention to modify the system of Karri et al. by using the functions, as taught by Ovadia, in order to provide at least one port-to-port connection controller for achieving a port-to-port connection between two out of the plurality of switch devices; regarding claim 5, wherein the plurality of switch controllers include interfaces, respectively, and the interfaces uses a same protocol to receive the device setup request, the resource manager manages bandwidth information of the GMPLS network, the plurality of switch controllers include interfaces, respectively, and the interfaces uses a same protocol to receive the device setup request, the resource manager manages bandwidth information of the GMPLS, for controlling switch devices provided for a GMPLS network, comprising providing a GMPLS controller including, a plurality of switch controllers controlling a plurality of switch devices, respectively, each of the plurality of switch devices including at least one port. The motivation of using these functions is to enhance the system in a cost effective manner.

7. Claims 3, 6, 8, 10, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ovadia (US 2004/0208544 A1) in view of Karri et al. (US 2002/0196808 A1) as applied to claims 1 and 16 above, and further in view of Nomura et al. (US 7,133,402 B2).

Karri et al. and Ovadia describe the claimed limitations as discussed in paragraph 6 above. Karri et al. disclose the following features: regarding claim 16, a resource manager responsive to a label request for managing labels, and for issuing a device setup request (Fig. 2, illustrating the exemplary node of the present invention, see “allocating communication resources and connection identifiers and using the set up message” recited in paragraph 0085 lines 1-8).

Ovadia discloses the following features: regarding claim 16, a GMPLS controller system used in a GMPLS network, comprising (Fig. 3, a block diagram illustrating a core switching node module for use in a photonic burst switching network, see “controller 88 provides a control plane signaling using GMPLS protocols” recited in paragraph 0068 lines 9-11), a plurality of GMPLS controllers each of which includes (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “the network controller can be distributed across switching nodes” recited in paragraph 0039 lines 12-17) and a switch controller controlling a switch device (Fig. 8, a block diagram illustrating a core switching node that supports GMPLS, see “the switches provide switching under the control interface unit 81” recited in paragraph 0066 lines 1-9 and paragraph 0067 lines 10-12).

Karri et al. and Ovadia do not disclose the following features: regarding claim 3, further comprising a label database describing whether each of the labels is in use or not, wherein the label request is indicative of a target label, and wherein the resource manager updates the label database to indicate that the target label is in use; regarding

claim 6, the plurality of switch devices include at least two out of an MPLS switch, a TDM switch, a Lambda switch, and a fiber switch and regarding claim 8, wherein the resource manager manages LSP information of the GMPLS network; regarding claim 10, wherein each of the switching device is selected out of a MPLS switch, a fiber switch, a TDM switch, and a Lambda switch; regarding claim 13, wherein the resource manager manages LSP information of the GMPLS network;

Nomura et al. discloses a link identifier assignment system in connection-oriented communication network with the following features: regarding claim 3, a label database describing whether each of the labels is in use or not (Fig. 2, label assignment module 100, see “process of reflecting this entry in the label assignment table” recited in column 19 lines 17-25); wherein the label request is indicative of a target label (Fig. 2, label assignment module 100, see “assigning the same label value to the establishing target connection” recited in column 17 lines 22-27 and column 16 lines 58-64) and wherein the resource manager updates the label database to indicate that the target label is in use (Fig. 2, label assignment module 100, see “label assignment indication is stored” recited in column 18 lines 46-59 in Third Embodiment); regarding claim 6, the plurality of switch devices include at least two out of an MPLS switch, a TDM switch, a Lambda switch, and a fiber switch (FIG. 1, outline of present invention, see “MPLS (Multi Protocol Label Switching and optical switches (optical cross connects OXC)” recited in column 1 lines 9-12 in field of invention and lines 31041 in description of related art) and regarding claim 8, wherein the resource manager manages LSP information of the GMPLS network (Fig. 2, LSP connections, see “label assignment

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processing module 100”, recited in column 6 lines 8-15); regarding claim 10, wherein each of the switching device is selected out of a MPLS switch, a fiber switch, a TDM switch, and a Lambda switch (FIG. 1, outline of present invention, see “MPLS (Multi Protocol Label Switching and optical switches (optical cross connects OXC)” recited in column 1 lines 9-12 in field of invention and lines 31041 in description of related art); regarding claim 13, wherein the resource manager manages LSP information of the GMPLS network (Fig. 2, LSP connections, see “label assignment processing module 100”, recited in column 6 lines 8-15);

It would have been obvious to one of ordinary skill in the art at the time of Invention to modify the system of Karri et al. with Ovadia by using the features, as taught by Nomura et al., in order to provide a label database describing whether each of the labels is in use or not, wherein the label request is indicative of a target label, and wherein the resource manager updates the label database to indicate that the target label is in use, the plurality of switch devices include at least two out of an MPLS switch, a TDM switch, a Lambda switch, and a fiber switch and the resource manager manages LSP information of the GMPLS network. The motivation of using these functions is to enhance the system in a cost effective manner.

Response to Arguments

8. Applicant's arguments with respect to claims 2-8 and 10-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Syed Bokhari/
Examiner, Art Unit 2416
11/26/2008

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2416